

CLAIMS:

1. An electro conductive tin oxide powder having an excellent deagglomeration ability to easily break agglomerated state to an extent reach to a monodispersed state, wherein the electro conductive tin oxide powder which is characterized in that having a deagglomeration ability represented by a $[D_{50}(I)/D_{50}(II)]$ ratio of 10.0 or more ($D_{50}(I)$: median particle size before dispersion treatment by a paint shaker, $D_{50}(II)$: median particle size after dispersion treatment by a paint shaker) and which is free from dopant.
2. The electro conductive tin oxide powder according to claim 1, wherein the $D_{50}(I)$ is 3.0 μm or less.
3. The electro conductive tin oxide powder according to claim 1, wherein the $D_{50}(II)$ is 0.20 μm or less.
4. The electro conductive tin oxide powder according to claim 1, wherein the conductive film formed by the paint which is prepared with the electro conductive tin oxide powder shows Haze value of 5% or less and surface resistance of $10^{10} \Omega/$ or less.
5. A method for producing an electro conductive tin oxide powder which is characterized in that steps for production are, adding a sodium stannate solution slowly into an aqueous acid solution till the solution pH goes down to 5 or under; followed by rinsing, followed by filtering and drying the resulting slurry and milling of the resulting dry powder and calcining of the milled powder in a non-oxidizing atmosphere.

6. The method for producing an electro conductive tin oxide powder according to claim 5, wherein the aqueous acid solution is one of an aqueous sulfuric acid solution, aqueous hydrochloric acid solution, aqueous nitric acid solution, or a mixture of thereof.
7. The method for producing an electro conductive tin oxide powder according to claim 5, wherein the finishing pH is 4 or under.
8. The method for producing an electro conductive tin oxide powder according to claim 5, wherein an acid concentration in the aqueous acid solution is in the range from 0.02 N to 3.00 N and sodium stannate concentration is in the range from 10 g/L to 500 g/L.
9. The method for producing an electro conductive tin oxide powder according to claim 5, wherein the reaction temperature is kept at 30°C to 90°C.
10. The method for producing an electro conductive tin oxide powder according to claim 5, wherein the non-oxidizing atmosphere is achieved by nitrogen and the calcination temperature is in the range from 200°C to 1200°C.
11. A paint which is characterized in that electro conductive tin oxide powder according to claim 1 is contained.
12. A paint which is characterized in that electro conductive tin oxide powder according to claim 2 is contained.

13. A paint which is characterized in that electro conductive tin oxide powder according to claim 3 is contained.

14. A paint which is characterized in that electro conductive tin oxide powder according to claim 4 is contained.